1. (Currently Amended) A method for identifying a compound for modulating the cellular activity or location of PTPL1, the method comprising the step of

## selecting a test compound and

evaluating the test compound to identify identifying a compound that modulates the interaction of PTPL1 with TAPP; or which modulates or mimics the interaction of TAPP with PtdIns(3, 4) $P_2$ ; or which modulates the cellular location of TAPP.

- 2. (Currently Amended) The method of claim 1 wherein the method selecting step comprises the step of using molecular modelling means to select or design a compound that is predicted to interact with the phosphoinositide binding domain of TAPP, wherein a three-dimensional structure of at least a part of the phosphoinoisitide binding domain of the TAPP is compared with a three-dimensional structure of a compound, and a compound that is predicted to interact with the said phosphoinositide binding domain is selected.
- 3. (Currently Amended) The method of claim 2 wherein the three-dimensional structure of at least a part of the phosphoinositide binding domain of the TAPP is a three-dimensional structure of at least a part of the phosphoinositide binding site of the TAPP and a compound that is predicted to interact with the said phosphoinositide binding site is selected.
- 4. (Currently Amended) The method of claim 1 wherein the method evaluating step comprises the steps of exposing a TAPP or PTPL1 polypeptide to a the test compound; and

determining whether the test compound modulates the interaction of PTPL1 with TAPP; or modulates or mimics the interaction of TAPP with PtdIns(3,4) P<sub>2</sub>; or modulates the

cellular location of TAPP.

- 5. (Currently Amended) The method of claim 1 or 5 wherein the TAPP comprises the C-terminal PH domain of human TAPP1 or TAPP2 and the three or four most C- terminal residues of full length human TAPP1 or TAPP2; and wherein the PTPL1 comprises one or more of the PDZ1 domain of human PTPL1, and/or the PDZ5 domain of human PTPL1 and optionally also or the phosphatase domain of human PTPL1.
- 6. (Currently Amended) The method of any one of claims claim 1, 4 or 5 comprising the step of wherein the evaluating comprises using a fluorescence-based assay system.
- 7. (Currently Amended) A method for selecting a compound for modulating signalling via PtdIns(3,4) $P_2$ , the method comprising the step of

selecting a test compound and

<u>evaluating the test compound to identify</u>

<u>identifying</u> a compound which modulates the interaction between

TAPP and PTPL1 or the intracellular location of PTPL1.

- 8. (Currently Amended) The method of claim 7 wherein the method evaluating comprises the steps of exposing a TAPP or PTPL1 polypeptide to a test compound; and determining whether the test compound modulates the interaction between TAPP and PTPL1 or the intracellular location of PTPL1.
- 9. (Currently Amended) A kit of parts useful in carrying out a screening method of the invention comprising TAPP or a polynucleotide encoding TAPP, and PTPL1 or a polyoucleotide encoding PTPL1.
  - 10. (Original) A method for modulating the

cellular activity or location of PTPL1, the method comprising the step of exposing the PTPL1 to a compound that modulates the interaction of PTPL1 with TAPP; or that modulates or mimics the interaction of TAPP with  $PtdIns(3,4)P_2$ ; or that modulates the cellular location of TAPP.

- 11. (Currently Amended) The method of claim 10 wherein the method is performed in vitro.
- 12. (Original) A method for modulating signalling via PtdIns(3,4) $P_2$ , the method comprising the step of exposing the PTPL1 to a compound which modulates the interaction between TAPP and PTPL1 or the intracellular location of PTPL1.
- 13. Currently Amended) The method of claim 12 wherein the method is performed in vitro.

## 14.-17. (Canceled)

- 18. (New) A method of treating a patient in need of inhibition of apoptosis, the method comprising administering an effective amount of a compound that inhibits the interaction of PtdIns(3, 4) $P_2$  with TAPP or that inhibits the interaction of TAPP with PTPL1 to the patient under conditions effective to inhibit apoptosis.
- 19. (New) The method according to claim 18, wherein the patient is has diabetes, ischaemic disease, or requires wound healing or nerve regeneration.
- 20. (New) A method of treating a patient in need of promotion of apoptosis, the method comprising administering an effective amount of a compound that promotes the interaction of TAPP with PtdIns $(3,4)P_2$  or that mimics the effect of PtdIns $(3,4)P_2$  on TAPP, or that promotes the

interaction of TAPP with PTPL1 to the patient under conditions effective to promote apoptosis.

21. (New) The method according to claim 20 wherein the patient is being treated for cancer or inflammation.